CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 94-140
NPDES PERMIT NO. CA0037737

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

NORTH SAN MATEO COUNTY SANITATION DISTRICT
DALY CITY, SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

PURPOSE OF ORDER

1. North San Mateo County Sanitation District, hereinafter Discharger, submitted a Report of Waste Discharge date March 18, 1994, for reissuance of waste discharge requirements and a permit to discharge wastewater to waters of the State and the United States under the National Pollutant Discharge Elimination System (NPDES).

2. This discharge is presently regulated by Waste Discharge Requirements in Order No. 89-147, adopted by the Board on September 20, 1989, which allows discharge into the Pacific Ocean.

FACILITY DESCRIPTION

3. The discharger owns and operates the treatment plant located at Daly City. The plant provides secondary level treatment for domestic and commercial wastewater from the City of Daly City and portions of San Mateo County and the Westborough Water District within the City of South San Francisco. The discharger's service area has a present population of 94,187. The treatment plant has an average dry weather flow design of 8.0 million gallons per day (mgd), and can treat up to 25 mgd during the wet weather flow period. The plant presently discharges an average dry weather flow of 5.77 mgd, and an annual average effluent flow of 5.92 mgd.

4. The U.S. Environmental Protection Agency (USEPA) and the Board have classified this discharge as a major discharge.

5. Treatment facilities utilized prior to discharge into the Pacific Ocean, a water of the State and United States, consist of automatic bar screens, primary clarifiers, flow equalization basins, pure oxygen activated sludge reactors, secondary clarifiers, and chlorination and dechlorination. A treatment process schematic diagram is included as Attachment C.

6. Treated wastewater is currently discharged into the Pacific Ocean, a water of the State and United States, west of the Vista Grande Tunnel structure on Ocean Beach, San Francisco County through a submerged diffuser about 2500 feet offshore at a depth of 32 feet below mean lower low water (Latitude 37 Deg. 42 Min. 48 Sec.; Longitude 122 deg. 30 Min. 50 Sec.), with a initial dilution ration of 70:1

7. Solids treatment and disposal is as follows:

   Sludge is treated by gravity thickeners, air flotation thickeners, anaerobic digesters, and centrifuges with final disposal to a sanitary landfill or to a qualified biosolids reuse facility or project. The Regional Board will be notified in advance of any change in disposition of the material.

APPLICABLE PLANS & POLICIES

8. The State Water Resources Control Board adopted a revised "Water Quality Control Plan for the Ocean Waters of California" (California Ocean Plan) on September 22, 1988 and amended it on October 18, 1990.

BENEFICIAL USES

9. The Ocean Plan contains water quality objectives and beneficial uses for the Pacific Ocean. The beneficial uses of the Pacific Ocean are as follows:

   - Industrial Service Supply
   - Navigation
   - Water Contact Recreation
   - Non-contact Water Recreation
   - Ocean Commercial and Sport Fishing
   - Wildlife Habitat
   - Preservation of Rare and Endangered Species
   - Fish Migration
   - Fish Spawning
   - Shellfish Harvesting
   - Marine Habitat
   - Preservation of Areas of Special Biological Significance

OTHER FINDINGS

10. During dry weather, treated wastewater is discharged by gravity to an open storm channel just before it goes underground through the Vista Grande Tunnel. There it combines with any drainage water present and is discharged through the 33-inch outfall. During wet weather, whenever hydraulic capacity of the Tunnel may be exceeded, treated wastewater is discharged via force main around the Tunnel directly to the outfall to avoid incidental discharge to the beach due to overloading of the Tunnel Channel.

11. The 1986 Basin Plan initiated the Effluent Toxicity Characterization Program (ETCP) in which certain major dischargers (including North San Mateo County Sanitation District) were required to monitor their effluent using critical life stage toxicity tests to generate information on toxicity test species sensitivity and effluent variability to allow development of appropriate chronic toxicity effluent limitation.

    The result from the ETCP shows that NSMCSD currently does not need chronic toxicity limitations; however, this permit may be amended in the future to include chronic toxicity effluent limits and monitoring requirements.

12. Federal Regulations for storm water discharges were promulgated by the U.S. Environmental Protection Agency on November 19, 1990. The regulations [40 Code of Federal Regulations (CFR) Parts 122, 123, and 124] require specific categories of industrial activities including Publicly Owned Treatment Works (POTWs) which discharge storm water associated with industrial activity (industrial storm water) to obtain a NPDES permit and to implement Best Available Technology Economically Available (BAT) and Best Conventional Pollutant Control Technology (BCT) to control pollutants in industrial storm water discharges.

13. The storm water flows from the wastewater treatment facility process areas are directed to the wastewater treatment plant headworks and are treated along with the wastewater discharged to the treatment plant. These stormwater flows constitute all industrial stormwater at this facility and consequently this permit regulates all industrial stormwater discharge at this facility.

14. The discharger has implemented and is maintaining an USEPA approved pretreatment program in accordance with Federal pretreatment regulations (40 CFR 403) and this Board's Order No. 89-179.

15. An **Operations and Maintenance Manual** is maintained by the discharger for purposes of providing plant, and regulatory personnel with a source of information describing all equipment, recommended operation strategies, process control monitoring, and maintenance activities. In order to remain a useful and relevant document, the manual must be kept updated to reflect significant changes in treatment and collection facility equipment and operation practices.

16. This Order serves as an NPDES Permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the Public Resources Code [California Environmental Quality Act (CEQA)] pursuant to Section 13389 of the California Water Code.

NOTIFICATIONS AND MEETINGS

17. The discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided an opportunity to submit their written views and recommendations.

18. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and

regulations adopted thereunder, and to the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. Discharge of treated wastewater at a location or in a manner different from that described in Finding No. 6&7 is prohibited.

2. The average dry weather flow discharge shall not exceed 8.0 mgd. The average dry weather flow shall be determined over three consecutive dry weather months each year.

3. Discharges of water, materials, or wastes other than storm water, which are not otherwise authorized by this NPDES permit, to a storm drain system or waters of the State are prohibited.

4. Compliance with Effluent Limitation B.1.g shall be determined using 96-hour static renewal fish bioassays, and one of the following test species: three-spine stickleback, fathead minnow, or rainbow trout.

5. Discharges within 2,500 feet offshore from the extreme low waterline is prohibited.

6. The discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited. The discharge of sludge digester supernatant directly to the ocean, or into a waste stream that discharges to the ocean without further treatment is prohibited.

7. Storm water discharges shall not cause pollution, contamination, or nuisance.

8. Discharges of water, materials, or wastes other than stormwater, which are not otherwise authorized by this NPDES permit, to a storm drain system or waters of the state are prohibited.

B. EFFLUENT LIMITATIONS

The term "effluent" in the following limitations means the fully treated wastewater effluent from the discharger's wastewater treatment facility, as discharged to the Pacific Ocean.

1. The effluent discharged to the Pacific Ocean shall not exceed the following limits:

	Constituent	Units	Monthly Average	Weekly Average	Daily Maximum	Instantaneous Maximum
a.	Carbonaceous Biological Oxygen Demand($CBOD_5$, 20°C)	mg/l	25	40	50	--
b.	Total Suspended Solids	mg/l	30	45	60	--
c.	Oil & Grease	mg/l	10	--	--	20
d.	Settleable Matter	ml/l-hr	0.1	--	--	0.2
e.	Total Chlorine Residual (1)	mg/l	--	--	--	0.0
f.	Turbidity	NTU	75	100	225	--
g.	Toxicity Concentration (2)	tu	1.5	2.0	2.5	--

Footnote: (1)Requirement defined as below the limit of detection in standard test methods.

(2) Toxicity Concentration (tu) = $\frac{100}{\text{96-hour } LC_{50}}$

When it is not possible to determine the 96-hour LC50 from the bioassay test results due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the following:

$$\text{Toxicity Concentration (tu)} = \frac{\text{Log } (100 - S)}{1.7}$$

Where S = percent survival in 100 % wastewater.
If $S \geq 99$, the toxicity concentration shall be reported as zero.

2. **pH**: the pH of the discharge shall not exceed 9.0 nor be less than 6.0

3. **Total Coliform Bacteria:**

The treated wastewater, at some place in the treatment process prior to discharge, shall meet the following limits of bacteriological quality: The moving median value for the Most Probable Number (MPN) of total coliform bacteria in any five (5) consecutive samples shall not exceed 2400 MPN/100 ml; and, any single sample shall not exceed 24,000 MPN/100 ml.

4. **85 Percent Removal, BOD and TSS:**

The arithmetic mean of the biochemical oxygen demand (Five-day, 20°C) and total suspended solids values, by weight, for effluent samples collected in each calendar month shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period.

5. **FINAL TOXIC SUBSTANCES EFFLUENT LIMITATIONS:(a)(d)(e)**

The effluent shall not exceed the following limits: (see footnotes):

Table 2

Constituents	Units of Measurement	6-Month Median	Daily Maximum	Instantaneous Maximum
Arsenic	mg/l	358	2062	5470.6
Cadmium	ug/l	71	284	710
Chromium(VI)(b)	ug/l	142	568	1420
Copper	ug/l	73	712	1990
Lead	ug/l	142	568	1420
Mercury	ug/l	2.805	11.325	28.365
Nickel	ug/l	355	1420	3550
Selenium	ug/l	1065	4260	10650
Silver	ug/l	38.5	187.6	485.8
Zinc	ug/l	860	5120	13640
Cyanide(c)	ug/l	71	284	710
Ammonia (as N)	mg/l	42.6	170.4	426
Phenolic Compounds (non-chlorinated)	ug/l	2130	8520	21300
Chlorinated Phenolics	ug/l	71	284	710
Endosulfan	ng/l	639	1278	1917
Endrin	ng/l	142	284	426
HCH	ng/l	284	568	852
Radioactivity	Not to exceed limits specified in Title 17, Division 5, Chapter 4, Group 3, Article 3, Section 32069 of the California Code of Regulations.			

Table 2 (cont.)

Constituents	Units of Measurement	30 - day Average
Acrolein	mg/l	15.62
Antimony	mg/l	85.20
Bis(2-chloroethoxy)methane	ug/l	312.40
Bis(2-chloroisopropyl) ether	mg/l	85.20
Chlorobenzene	mg/l	40.47
Chromium(III)	mg/l	13,490.00
Di-n-butyl Phthalate	mg/l	248.50
Dichlorobenzenes	mg/l	362.10
1,1-Dichloroethylene	mg/l	504.10
Diethyl phthalate	mg/l	2,434.00
Dimethyl phthalate	mg/l	58,220.00
4,6,-Dinitro-2-methylphenol	mg/l	15.62
2,4,- Dinitrophenol	ug/l	284.00
Ethylbenzene	mg/l	291.10
Fluroanthene	mg/l	1.07
Hexachlorocyclopentadiene	mg/l	4.12
Nitrobenzene	ug/l	347.90
Thallium	ug/l	994.00
Toluene	mg/l	6,035.00
1,1,2,2-Tetrachloroethane	mg/l	85.20
Acrylonitrile	ug/l	7.10
Aldrin	ng/l	15.62
Benzene	ug/l	418.90
Benzidine	ng/l	4.90
Beryllium	ng/l	2,343.00
Bis(2-chloroethyl)ether	ug/l	3.20

Table 2 (cont.)

Constituents	Units of Measurement	30 - Day Average
Bis(2-ethylhexyl)phthalate	ug/l	248.50
Carbon tetrachloride	ug/l	63.90
Chlordane	ng/l	1.63
Chloroform	mg/l	9.23
DDT	ng/l	12.07
1,4-Dichlorobenzene	mg/l	1.28
3,3-Dichlorobenzidine	ng/l	575.10
1,2-Dichloroethane	mg/l	9.23
Dichloromethane	mg/l	31.95
1,3-Dichloropropene	ug/l	631.90
Dieldrin	ng/l	2.84
2,4-Dinitrotoluene	ug/l	184.60
1,2-Diphenylhydrazine	ug/l	11.36
Halomethanes	mg/l	9.23
Heptachlor	ng/l	51.12
Hexachlorobenzene	ng/l	14.91
Hexachlorobutadiene	ug/l	994.00
Hexachloroethane	ug/l	177.50
N-nitrosodimethylamine	ug/l	518.30
N-nitrosodiphenylamine	ug/l	177.50
PAHs	ng/l	624.80
PCBs	ng/l	1.34
TCDD equivalents	pg/l	0.27
Tetrachloroethylene	mg/l	7.03
Toxaphene	ng/l	14.91
Trichloroethylene	mg/l	1.92
2,4,6-Trichlorophenol	ug/l	20.59
Vinyl chloride	mg/l	2.56

Footnotes:

a. Limits apply to the average concentration of all samples collected during the averaging period (Daily - 24-hour period; Monthly - Calendar month).

b. The discharger may meet this limit as total chromium.

c. The discharger may demonstrate compliance with this limitation by measurement of weak acid dissociable cyanide.

d. All analyses shall be performed using current USEPA Methods, as specified in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", SW-846, Third Edition, or "Methods for Chemical Analysis for Water and Wastewater",EPA 1980, or 40 CFR 136. Detection limits, practical quantitative levels, and limits of quantitative will be taken into account in determining compliance with effluent limitations.

e. The above limits are based on Ocean Plan criteria, using a minimum initial dilution value of 70:1. If actual dilution is found to be less than 70:1, these values will be recalculated.

C. RECEIVING WATER LIMITATIONS

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:
   a. Floating, suspended, or deposited macroscopic particulate matter or foam; or
   b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses; or
   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels; or
   d. Visible, floating, suspended, or deposited oil or other products of petroleum origin; or
   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.

2. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

3. The discharge shall not cause a violation of any particular water quality standard for receiving waters adopted by the Board or the State Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

4. The dissolved oxygen concentration shall not at any time be depressed more than ten percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste material.

5. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.

6. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.

7. The concentration of substances set forth in Chapter IV, Table B of the Water Quality Control Plan for Ocean Waters of California, dated October 18, 1990, in Marine sediments shall not be increased to levels which would degrade indigenous biota.

8. The concentration of organic materials in marine sediments shall not be increased to levels which would degrade marine life.

9. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.

10. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.

11. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.

12. The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

13. Discharge of radioactive waste shall not degrade marine life.

14. With in a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for body contact recreation, as determined by the Regional Board the following bacteriological objectives shall be maintained throughout the water column:

    a. Samples of water from each sampling station shall have a concentration of total coliform organisms less than 1,000 per 100 ml; provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml, and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml.

    b. The fecal coliform concentration based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60 day period exceed 400 per 100 ml.

15. At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacteriological objectives shall be maintained throughout the water column:

    The median total coliform concentration shall not exceed 70 per 100 ml, and not more than 10 percent of the sample shall exceed 230 per 100 ml.

D. SLUDGE MANAGEMENT PRACTICES

1. All sludge generated by the discharger must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR Part 503 and 40 CFR Part 257. If the discharger desires to dispose of sludge by a different method, a request for permit modification must be submitted to the USEPA 180 days before start-up of the alternative disposal practice. All the requirements in 40 CFR 503 & 40 CFR 257 are enforceable by USEPA whether or not they are stated in an NPDES permit or other permit issued to the discharger.

2. Sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, or result in groundwater contamination.

3. Duty to mitigate: The discharger shall take all reasonable steps to prevent or minimize any sludge use or disposal which has a likelihood of adversely affecting human health or the environment.

4. The discharge of sewage sludge shall not cause waste material to be in a position where it is, or can be carried from the sludge treatment and storage site and deposited in the waters of the State.

5. The sludge treatment and storage site shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the temporary storage site. Adequate protection is defined as protection from at least a 100-year storm and protection from the highest possible tidal stage that may occur.

6. The discharger shall submit an annual report to the USEPA and the Board containing monitoring results and pathogen and vector attraction reduction requirements as specified by 40 CFR 503, postmarked February 19 of each year, for the period covering the previous calendar year.

7. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR 258. In the annual self-monitoring report, the discharger shall include the amount of sludge disposed of, and the landfill(s) to which it was sent.

8. Permanent on-site sludge storage or disposal activities are not authorized by this permit. A report of Waste Discharge shall be filed and the site brought into compliance with all applicable regulations prior to commencement of any such activity by the discharger.

9. General Provisions of this Board's "Standard Provisions and Reporting Requirements", dated August 1993, apply to sludge handling, disposal and reporting practices.

10. The Board may amend this permit prior to expiration if changes occur in applicable state and federal sludge regulations.

E. PROVISIONS

1. Requirements prescribed by this Order supersede the requirements prescribed by Order No.89-147. Order No.89-147 is hereby rescinded.

2. Where concentration limitations in mg/l or µg/l are contained in this Permit, the following Mass Emission Limitations shall also apply.

   (Mass Emission Limit in kg/day) = (Concentration Limit in mg/l) x (Actual Flow in million gallons per day averaged over the time interval to which the limit applies) x 3.78 (conversion factor).

3. The discharger shall comply with all sections of this Order immediately upon adoption.

4. **Compliance With Toxic Substances Limitations**

   a. The discharger shall comply with Effluent Limitations in Section B immediately upon adoption of this Order. The discharger may request an extended compliance time schedule for particular substances, based on the implementation of an aggressive source control and waste minimization program. Justification for longer compliance periods must include, at a minimum, all of the following:

      (1) Results of a diligent effort to quantify pollutant levels in the discharge and the sources of the pollutant in the waste stream;

      (2) Documentation of source control efforts currently underway or completed, including compliance with the General Source Control/Waste Minimization program described in the Basin Plan;

      (3) A proposed schedule for additional source control measures or waste treatment; and

      (4) A demonstration that the proposed schedule is as short as possible.

   b. The discharger shall initiate a monitoring program using appropriate USEPA methods and detection limits, to evaluate the compliance status for all constituents listed in Effluent Limitations in Section B. Monitoring for constituents shown in Section B shall be performed during all periods of surface water discharge.

5. If the discharger chooses to pursue a capacity increase for the treatment plant, information that must be submitted prior to Board consideration of a flow increase must include, but may not be limited to, the following:

a. Engineering reports documenting adequate reliability, capacity and performance of the completed improvements to the treatment facility;

b. Documentation that increased discharges (evaluation must include assessment of wet weather flows) will not result in degradation of receiving waters, or adverse impacts on beneficial uses of receiving waters, in accordance with State and Federal regulations;

c. Plans for including reuse of the treated effluent as an integral part of the wastewater management plan; and

d. Documentation of compliance with the CEQA.

6. The discharger shall implement and enforce its approved pretreatment program in accordance with Board Order 89-179 and its amendments thereafter. The discharger's responsibilities include, but are not limited to:

a. Enforcement of National Pretreatment Standards (e.g. prohibited discharges, Categorical Standards, local limits) in accordance with 40 CFR 403.5 and Section 307(b) and (c) of the Clean Water Act.

b. Implementation of the pretreatment program in accordance with legal authorities, policies, procedures, and financial provisions described in the General Pretreatment regulations (40 CFR 403) and its approved pretreatment program.

c. Submission of annual report to USEPA and the Board as described in Board Order 89-179, and its amendments thereafter.

April 15 Reporting Requirements

7. The discharger shall review, and update as necessary, its Operations and Maintenance Manual, annually, or within 90 days of completion of any significant facility or process changes. The discharger shall submit to the Board, by April 15 of each year, a letter describing the results of the review process including an estimated time schedule for completion of any revisions determined necessary, and a description or copy of any completed revisions.

8. Annually, the discharger shall review and update as necessary, its Contingency Plan as required by Board Resolution 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or adequately implement a contingency plan will be the basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code. Plan revisions, or a letter stating that no changes are needed, shall be submitted to the Board by April 15 of each year.

9. The discharger shall implement a program to regularly review and evaluate its wastewater collection, treatment and disposal facilities in order to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as

necessary, in order to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the discharger's service responsibilities. A Treatment Facilities Evaluation Program report discussing the status of this evaluation program, including any recommended or planned actions, shall be submitted to the Board by April 15 of each year.

Other Reporting Requirements

10. The discharger shall comply with the **Self-Monitoring Program** for this order, as adopted by the Board and as may be amended by the Executive Officer.

11. The discharger shall comply with all applicable items of the attached **"Standard Provisions and Reporting Requirements "** dated August 1993.

12. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

    To assume operation of this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. (Refer to Standard Provisions, referenced above). The request must contain the requesting entity's full legal name, the address and telephone number of the persons responsible for contact with the Board and a statement. The statement shall comply with the signatory paragraph described in Standard Provisions and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code.

13. The Board may modify, or revoke and reissue, this Order and Permit if present or future investigations demonstrate that the discharge(s) governed by this Order are causing or significantly contributing to adverse impacts on water quality and/or beneficial uses of the receiving waters.

14. This Order expires on October 19, 1999. The discharger must file a report of waste discharge in accordance with Title 23, Division 3, Chapter 9, Article 3, of the California Administrative Code not later than 120 days before this expiration date as application for reissuance of waste discharge requirements.

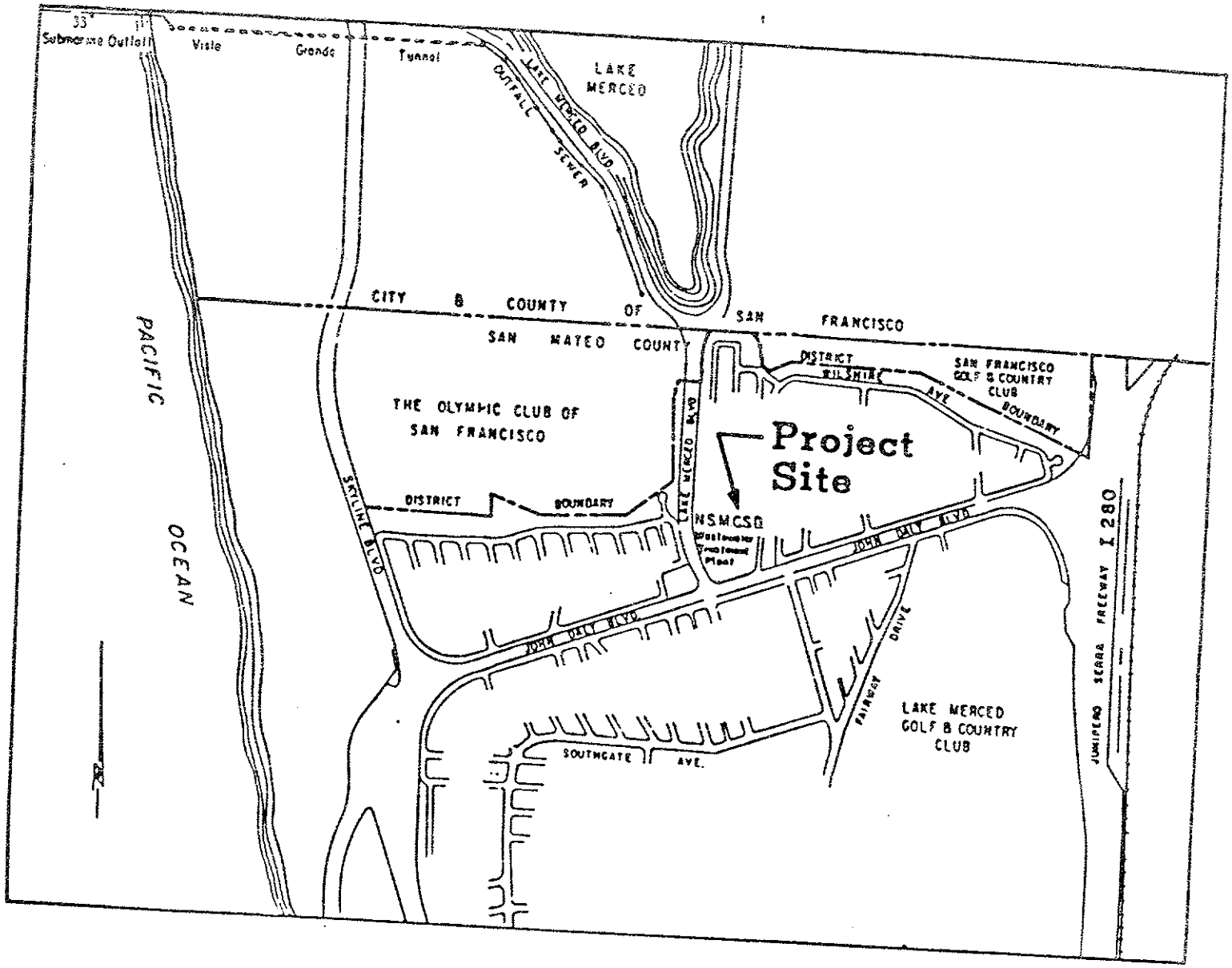
15. This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after the date of its adoption provided the Regional Administrator, EPA, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on October 19, 1994.

STEVEN R. RITCHIE
Executive Officer

Attachments:

A. Location/Site Maps
B. Summary of Report Due dates/Deadlines
C. Process Schematic
D. Contingency Plan - Regional Water Board Resolution No. 74-10
E. Self-Monitoring Program
F. Regional Water Board NPDES Standard Provisions and Reporting Requirements - August 1993



LOCATION MAP

ATTACHMENT B

SUMMARY OF REPORT DUE DATES AND ACTION DEADLINES

DUE DATE TO BOARD	NAME OF REPORT/ACTION REFERENCE	
A. ANNUAL REPORTS		
February 19	Sludge Monitoring	D. 6
February 28	Pretreatment Report	E.6
April 15	Operations & Maintenance Manual	E.7
April 15	Contingency Plan	E.8
April 15	Treatment Facilities Eval. Program	E.9

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

NORTH SAN MATEO COUNTY SANITATION DISTRICT
DALY CITY,
SAN MATEO COUNTY

NPDES PERMIT NO. CA0037737
ORDER NO. 94-140

CONSISTS OF

PART A,
DATED AUGUST 1993

AND

PART B

PART B
NORTH SAN MATEO COUNTY SANITATION DISTRICT

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT AND INTAKE

Station	Description
A-001	At any point in the treatment facilities headworks at which all waste tributary to the system is present, preceding any phase of treatment, and exclusive of any return flows or process side streams.

B. EFFLUENT

Station	Description
E-001	At any point in the treatment facilities between the point of discharge and the point at which all waste from the treatment plant is present following dechlorination.
E-001-D	At any point in the treatment facilities after disinfection is complete and prior to dechlorination.

C. RECEIVING WATERS

Station	Description
C	At the outfall sewer
C-1-N	50 feet north of outfall sewer
C-2-N	100 feet north of outfall sewer
C-3-N	500 feet north of outfall sewer
C-1-S	50 feet south of outfall sewer
C-2-S	100 feet south of outfall sewer
C-3-S	500 feet south of outfall sewer

D. LAND OBSERVATIONS

Station	Description
P-1 through P-'n'	Located along the periphery of the waste treatment or disposal facilities, at equidistant intervals, not to exceed 500 feet. (a sketch showing the locations of these stations will accompany each report.)

E. OVERFLOWS AND BYPASSES

Station	Description
OV-1 through OV-'n'	Bypass or overflows from manholes, pump stations, or collection systems.

REPORTING - Shall be submitted monthly and include date, time, quantity, and period of each overflow or bypass and measures taken or planned to prevent future occurrences.

II. SCHEDULE OF SAMPLING, ANALYSIS, AND OBSERVATIONS

The schedule of sampling, analysis, and observations shall be that given as Table I.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in the Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 89-148.

2. Is effective by October 19, 1994.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the dischargers and revisions will be ordered by the Executive Officer.

Steven R. Ritchie
Executive Officer

Attachments:

Table I and Footnotes
Part A, August 1993
Map - Receiving Water Stations

Table 1

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS (1)

Sampling Station		A-001		E-001		E-	001D	All P Sta.	All OV Sta.	All C Sta.	Misc. Observe.
TYPE OF SAMPLE	Unit	C-24	G(3)	C-24(3)	Cont.	G	C-24	O	O	G	O
Flow Rate	mgd				D						
BOD, 5-day, 20 deg C, CBOD; or COD	mg/l & kg/day	2/W		3/W							
Chlorine Residual & Dosage	mg/l & kg/day		2H	OR CONT(6)		2H OR	Cont				
Total Suspended Solids	mg/l & kg/day	2/W		D							
Oil & Grease	mg/l & kg/day	2/M	2/M(2)								
Settleable Matter	mg/l-hr & cu.		D								
Turbidity	NTU			D							
Fish Toxicity 96-hr. LC50	tu			2/M							
Ammonia Nitrogen & Un-ionized Ammonia	mg/l &kg/day			2/M(7)						Q	
pH	pH units		D	2/M(7)			D	2/M		Q	
Dissolve oxygen	mg/l and % Saturation		D	2/M(7)			D			Q	
Temperature	deg C		D	2/M(7)			D			Q	
Coliform (Total or Fecal)	MPN/100 ml					5/W					
Salinity	ppt									Q	
Secchi Disc	inches									Q	
Sulfides (if DO<5.0 mg/l) Total & Dissolved	mg/l		D				D				
Arsenic	µg/l			M(4)							
Cadmium	µg/l			M(4)							
Chromium(VI)	µg/l			M(4)							
Copper	µg/l			M(4)							
Lead	µg/l			M(4)							
Mercury	µg/l			M(4)							
Nickel	µg/l			M(4)							
Selenium	µg/l			M(4)							
Silver	µg/l			M(4)							
Zinc	µg/l			M(4)							
Cyanide	µg/l			M(4)							
Phenolic Compounds	µg/l			M(4)							
Chlorinated Phenolics	µg/l			Y(4)							
Endosulfan	ng/l			Y(4)							
Endrin	ng/l			Y(4)							
HCH	ng/l			Y(4)							
Radioactivity				Y(4)							
All Applicable Standard Observations			D					2/W	E	Q	
Daily Rainfall											D
Dewatered Sludge											D(8)
Acrolein	µg/l			Y(4)							
Antimony	mg/l			Y(4)							
Bis(2-chloroethoxy) methane	µg/l			Y(4)							
Bis (2-chloroisopropyl) ether	mg/l			Y(4)							
Chlorobenzene	µg/l			Y(4)							
Chromium (III)	mg/l			Y(4)							
Di-n-butyl phthalate	mg/l			Y(4)							
Dichlorobenzenes	mg/l			Y(4)							
1,1-Dichloroethylene	mg/l			Y(4)							

Sampling Station		A-001		E-001		E-	001D	All P Sta.	All OV Sta.	All C Sta.	Misc. Observe.
TYPE OF SAMPLE	Unit	C-24	G(3)	C-24(3)	Cont.	G	C-24	O	O	G	O
Diethyl phthalate	mg/l			Y(4)							
Dimethyl phthalate	mg/l			Y(4)							
4,6,-Dinitro-2-methylphenol	µg/l			Y(4)							
2,4-Dinitrophenol	µg/l			Y(4)							
Ethylbenzene	mg/l			Y(4)							
Fluroanthene	µg/l			Y(4)							
Hexachlorocyclopentadiene	µg/l			Y(4)							
Isophorone	mg/l			Y(4)							
Nitrobenzene	µg/l			Y(4)							
Thallium	µg/l			Y(4)							
Toluene	mg/l			Y(4)							
1,1,2,2-Tetrachloroethane	mg/l			Y(4)							
Tributyltin	ng/l			Y(4)							
1,1,1-Trichloroethane	mg/l			Y(4)							
1,1,2-Trichloroethane	mg/l			Y(4)							
Acrylonitrile	µg/l			Y(4)							
Aldrin	ng/l			Y(4)							
Benzene	µg/l			Y(4)							
Benzidine	ng/l			Y(4)							
Beryllium	ng/l			Y(4)							
Bis(2-chloroethyl)ether	µg/l			Y(4)							
Bis(2-ethylhexyl)phthalate	µg/l			Y(4)							
Carbon tetrachloride	µg/l			Y(4)							
Chlordane	ng/l			Y(4)							
Chloroform	mg/l			Y(4)							
DDT	ng/l			Y(4)							
1,4-Dichlorobenzene	µg/l			Y(4)							
3,3'-Dichlorobenzidine	ng/l			Y(4)							
1,2-Dichloroethane	mg/l			Y(4)							
Dichloromethane	mg/l			Y(4)							
1,3-Dichloropropene	µg/l			Y(4)							
Dieldrin	ng/l			Y(4)							
2,4 - Dinitrotoluene	µg/l			Y(4)							
1,2-Diphenylhydrazine	µg/l			Y(4)							
Halomethanes	mg/l			Y(4)							
Heptachlor	ng/l			Y(4)							
Hexachlorobenzene	ng/l			Y(4)							
Hexachlorobutadiene	µg/l			Y(4)							
Hexachloroethane	µg/l			Y(4)							
N-nitrosodimehtylamine	µg/l			Y(4)							
N-nitrosodiphenylamine	µg/l			Y(4)							
PAHs	ng/l			Y(4)							
PCBs	ng/l			Y(4)							
TCDD equivalents	pg/l			Y(4)							
Tetrachloroethylene	µg/l			Y(4)							
Toxaphene	ng/l			Y(4)							
Trichloroethylene	µg/l			Y(4)							
2,4,6-Trichlorophenol	µg/l			Y(4)							
Vinyl chloride	µg/l			Y(4)							

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample 24-hr
Cont = continuous sampling
O = observation

TYPES OF STATIONS

A = treatment facility influent stations
E = waste effluent stations
C = receiving water stations
P = treatment facilities perimeter stations
OV = overflows and bypasses
Misc. Obsv = Miscellaneous Observations

FREQUENCY OF SAMPLING

E = each occurrence	2/H = twice per hour	2H = every 2 hours
H = once each hour	2/W = 2 days per week	2D = every 2 days
D = once each day	5/W = 5 days per week	2W = every 2 weeks
W = once each week	2/M = 2 days per month	3M = every 2 months

M = once each month
2/Y = once in March and once in September
Cont = continuous
Q = quarterly, once in March , June, September and December

FOOTNOTES

1. During any day when bypassing occurs from any treatment unit(s) in the plant or from the outfall, the monitoring program for the effluent and any nearshore discharge shall include the following in addition to the above schedule for sampling, measurement and analyses:

   a. Composite sample for BOD and Total Suspended Solids (Influent and Effluent, for the duration of the bypass or 24 hours, whichever is shorter.)

   b. Grab samples for Total Coliform, Settleable Matter, Oil and Grease, and chlorine residual (continuous or every two hours).

   c. Continuous monitoring of flow.

2. In the event that sampling for oil and grease once every two weeks or less frequently shows an apparent violation of the waste discharge permit monthly average limitation (considering the results of one or two day's sampling as a monthly average), then the sampling frequency shall be increased to weekly so that a true monthly average can be computed and compliance can be determined.

3. Grab samples shall be taken on day(s) of composite sampling.

4. If any samples are in violation of limits, sampling shall be increased for that parameter to weekly until compliance is demonstrated in two successive samples.

5. Fish toxicity shall be determined using 96 hour static renewal fish bioassays with one of the following test species: three-spined stickleback, rainbow trout or fathead minnow. Effluent used for fish bioassays must be dechlorinated prior to testing.

6. Data shall be reported using forms provided or approved equivalent. Chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, grab samples shall be taken every 30 minutes until compliance is achieved.

7. Dissolved oxygen, pH, and temperature shall be tested for on the same composite sample(s) used for the bioassay(s) at the start of the bioassay(s) and at intervals of 24, 48, 72, and 96 hours after starting the bioassay(s). Ammonia nitrogen and unionized ammonia shall be tested for on the same composite sample(s) used for the bioassays(s) at the start of the bioassay test(s). The method of calculating unionized ammonia shall be indicated.

8. Daily records shall be kept of the quantity and solids contents of dewatered sludge disposed of and the location of disposal.

NORTH SAN MATEO COUNTY SANITATION DISTRICT WASTEWATER TREATMENT PLANT

TREATMENT DIAGRAM

INCLUDES ALL MODIFICATIONS FOR COMPLETION IN OCTOBER, 1989